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NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NC DENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

S&ME, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Connell Ware Phone: (336) 288-7180

E-mail: cware@smeinc.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Caswell County Landfill	State Rt. 1367 Yanceyville, NC 27379	1701	.0500	June 12, 2008

Environmental Status: (Check all that apply)

Initial/Background Monitoring Detection Monitoring Assessment Monitoring Corrective Action

Type of data submitted: (Check all that apply)

<input checked="" type="checkbox"/> Groundwater monitoring data from monitoring wells	<input type="checkbox"/> Methane gas monitoring data
<input type="checkbox"/> Groundwater monitoring data from private water supply wells	<input type="checkbox"/> Corrective action data (specify) _____
<input type="checkbox"/> Leachate monitoring data	
<input checked="" type="checkbox"/> Surface water monitoring data	<input type="checkbox"/> Other(specify) _____

Notification attached?

- No. No groundwater or surface water standards were exceeded.
- Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
- Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Edmund Q. B. Henriques

Environmental Department Manager (336) 288-7180

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

Signature

Date



CASWELL COUNTY LANDFILL
Yanceyville, North Carolina
Semi-Annual Groundwater Monitoring Report
June 2008 Sampling
S&ME Project No. 1584-07-034

Prepared For:

Caswell County
P.O. Box 98
144 Court Square
Yanceyville, NC 27379

Prepared By:

S&ME, Inc.
3718 Old Battleground Road
Greensboro, North Carolina 27410

September 2008

I hereby certify this 7th day of October, 2008, that this report was prepared by me or under my direct supervision.

Edmund Q.B. Henriques, L.G.
Environmental Department Manager

Project Management performed by:

Connel D. Ware
Senior Project Manager

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1.0 EXECUTIVE SUMMARY

Six monitoring wells at the Caswell County Landfill were sampled on June 12, 2008. These six wells (MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6) comprise the groundwater monitoring system for the closed Caswell County Landfill. This sampling event was conducted according to North Carolina Solid Waste Management Guidelines. Samples were analyzed by PACE Analytical Services, Inc. of Huntersville, North Carolina, a North Carolina certified laboratory. The six samples collected from the on-site monitoring wells were submitted for analysis of the North Carolina Landfill Appendix I volatile organic constituents and eight RCRA Metals.

Analytical results of the six water samples indicate that no RCRA metals were detected at concentrations exceeding the corresponding 15A NCAC 2L groundwater quality standards (NCAC 2L groundwater quality standard) during this event with the exception of cadmium in monitoring wells MW-2 and MW-5. The groundwater samples collected from MW-2 and MW-5 showed reported concentrations of 5.3 µg/L and 2.3µg/L for cadmium respectively which both exceed the established 15 NCAC 2 L groundwater quality standard for cadmium set at 1.75 µg/L. Cadmium was also detected in the groundwater sample collected from monitoring well MW-1 (upgradient/background well) at a reported concentration of 1.2 µg/L. However, this reported concentration is less than the NCAC 2L groundwater quality standard for cadmium.

The metal barium was also quantified in the groundwater sample collected from one or more groundwater monitoring wells during the June 12, 2008 groundwater monitoring event. However, the reported barium concentrations were less than the 2L groundwater quality standard.

There were no other metals detected above the method detection limit from any other groundwater monitoring wells during the June 12, 2008 groundwater monitoring event.

The volatile organic constituent benzene was detected in MW-2 (2.1 µg/L) and MW-4 (1.2 µg/L) at reported concentrations above the NCAC 2L standard (1 µg/L). Benzene was also detected in the groundwater sample collected from monitoring well MW-5 at a reported concentration of 1.0 µg/L, which is equal to the NCAC 2L groundwater quality standard for benzene.

The organic constituent 1,4-dichlorobenzene was detected in the groundwater samples collected from wells MW-2 (18.3 µg/L), MW-3 (3.3 µg/L), MW-4 (14.8 µg/L), and MW-5 (11.0 µg/L) at reported concentrations above the NCAC 2L groundwater quality standard (1.4 µg/L) for this constituent.

Chlorobenzene, chloroethane, 1,2-dichlorobenzene, and 1,1-dichloroethane were detected in one or more groundwater samples during this monitoring event; however, each of the reported concentrations of these constituents were less than their respective NCAC 2L groundwater quality standard. No other volatile organic compounds were detected in the monitoring wells sampled during this event.

There were no volatile organic constituents detected above the method detection limit in either of the stream sampling locations. The metal barium was detected in surface water sample SW-1 at a reported concentration of 32.7 µg/L and in surface water sample SW-2 at a reported concentration of 36.0 µg/L. However, both of these reported concentrations are below the 15A NCAC 2B Surface Water Standard set at 1000 µg/L for barium. There were no other metals detected above the method detection limit in the surface water samples during this sampling event.

It is believed that the cause of the 2L exceedances within the hydrogeologic regime at the Caswell County Landfill is caused from percolation of landfill constituents from the waste management units into the uppermost groundwater aquifer. Due to the detection of these exceedances of the NCAC 2L groundwater quality standards in the compliance wells, S&ME recommends that a water supply well receptor survey be completed for the Caswell County Landfill and the development of plans to address the NCAC 2L exceedances.

2.0 INTRODUCTION

The Caswell County Landfill is a closed facility that currently monitors groundwater under a Post Closure Care Plan on a semi-annual basis. The facility uses a network of six (6) groundwater monitoring wells to monitor groundwater quality at the Facility. The groundwater monitoring network is made up of one upgradient monitoring well (MW-1) and five downgradient compliance monitoring wells (MW-2, MW-3, MW-4, MW-5, and MW-6). The collected groundwater samples are analyzed in accordance with 15A NCAC 13B.1632 for the North Carolina Landfill Appendix I volatile organic constituent suite plus the 8 RCRA metals. Groundwater monitoring wells were purged and groundwater samples were collected using new, disposable, Teflon bailers, or a sterile peristaltic pump with new Teflon tubing.

The facility also typically monitors surface water quality at the stream that crosses the downgradient region of the Facility. As conditions allow, during each semi-annual monitoring event, two surface water samples are collected from this stream at designated sampling points. During the June 12, 2008 sampling event, stream samples were collected from both surface water monitoring points SW-1 and SW-2.

This report discusses the field procedures, summarizes the field measurements and analytical results for the June 12, 2008 water quality monitoring event.

3.0 SCOPE OF WORK

S&ME has performed the first semi-annual groundwater sampling of the six (6) network groundwater monitoring wells for the 2008 groundwater monitoring year. The groundwater monitoring wells were purged, sampled, and the collected groundwater samples analyzed (in accordance with 15A NCAC 13B.1632) for the North Carolina Appendix I volatile organic constituents and the eight RCRA metals. This semi-annual groundwater monitoring report has been prepared to summarize the June 2008 groundwater monitoring event and includes:

- Summary Tables of the laboratory analytical data from each sampling event,

- Development of a potentiometric map incorporating the latest groundwater elevation data, and
- A discussion of findings and results.
- An electronic copy of this report will be sent to the North Carolina Department of Environment and Natural Resources (NC DENR)

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater monitoring well sampling took place on June 12, 2008. The monitoring well locations with respect to the Facility layout are shown on **Figure 1**. A representative from S&ME opened each well and measured the static water level from the top edge of the PVC casing in wells. The total well depth was used to determine the volume of water in the wells at the time of the sampling event. These data are summarized in **Table 1**.

Monitor wells MW-1, MW-2 and MW-4 were manually purged using a new, sterile Teflon bailer prior to collecting the water samples. Each well was purged of three times the well volume or purged until the well went dry prior to the collection of the groundwater sample. The bailer was lowered, by hand, using a nylon rope into the well in such a manner as to minimize agitation of the groundwater. The purge water from each of these wells was monitored for pH, conductivity, temperature, and turbidity.

Monitor wells MW-3, MW-5 and MW-6 were purged and sampled using a peristaltic pump. New Teflon tubing was used at each well. Each well was purged of three times the well volume or purged until the well was dry prior to the collection of the groundwater sample. The purge water from each of these wells was monitored for pH, conductivity, temperature, and turbidity (qualitative).

The field data collected during sampling was recorded on the groundwater sampling field data sheets included in **Appendix A** and summarized in **Table 2** of this report.

Immediately upon collection, each groundwater sample was placed in laboratory supplied containers, packed on ice, and placed under chain-of custody. The sampling technician wore latex gloves that were changed between wells to reduce the possibility of cross contamination.

All monitoring well samples were then sent to PACE Analytical Services, Inc. (PACE) in Huntersville, North Carolina to be analyzed for Appendix I volatile organic constituents and the eight RCRA metals.

4.2 Surface Water Sampling

Surface water sampling took place on June 12, 2008. Two stream samples (SW-1 and SW-2) were collected from an unnamed tributary of Moon Creek, which flows along the eastern portion of the Facility and flows easterly away from the Landfill. Surface water sample (SW-1) was collected from an upgradient position with respect to the waste management unit and SW-2 was collected downgradient of the waste management unit.

The surface water samples were collected by immersing laboratory supplied containers directly into the stream at the locations to be sampled. After collection, the surface water samples were packed on ice and placed under chain-of-custody. All stream samples were analyzed for the North Carolina Appendix I volatile organic constituents as well as the 8 RCRA metals by PACE Analytical Services, Inc.; a North Carolina certified laboratory.

5.0 RESULTS

5.1 Groundwater Analytical Results

The results of the laboratory analyses for the groundwater monitoring well samples are summarized in **Tables 3 & 4**. The complete laboratory report is included in **Appendix B**. The following summarizes the groundwater sample analyses for the six wells (MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6) sampled on June 12, 2008.

Metals:

Analytical results of the six water samples indicate that no RCRA metals were detected at concentrations exceeding the corresponding 15A NCAC 2L groundwater quality standards (NCAC 2L groundwater quality standard) during this event with the exception of cadmium in monitoring wells MW-2 and MW-5. The groundwater samples collected from MW-2 and MW-5 reported concentrations of 5.3 µg/L and 2.3µg/L for cadmium respectively which both exceed the established 15 NCAC 2 L groundwater quality standard for cadmium set at 1.75 µg/L. Cadmium was also detected in the groundwater sample collected from monitoring well MW-1 (upgradient/background well) at a reported concentration of 1.2 µg/L. However, this reported concentration is less than the NCAC 2L groundwater quality standard for cadmium.

The metal barium was also quantified in the groundwater sample collected from one or more groundwater monitoring wells during the June 12, 2008 groundwater monitoring event. However, the reported barium concentrations were less than the 2L groundwater quality standard.

There were no other metals detected above the method detection limit from any other groundwater monitoring wells during the June 12, 2008 groundwater monitoring event.

Volatile Organic Compounds:

The volatile organic constituent benzene was detected in MW-2 (2.1 µg/L) and MW-4 (1.2 µg/L) at reported concentrations above the NCAC 2L standard (1 µg/L). Benzene was also detected in the groundwater sample collected from monitoring well MW-5 at a reported concentration of 1.0 µg/L, which is equal to the NCAC 2L groundwater quality standard for benzene.

The organic constituent 1,4-dichlorobenzene was detected in the groundwater samples collected from wells MW-2 (18.3 µg/L), MW-3 (3.3 µg/L), MW-4 (14.8 µg/L), and MW-5 (11.0 µg/L) at reported concentrations above the NCAC 2L groundwater quality standard (1.4 µg/L) for this constituent.

Chlorobenzene, chloroethane, 1,2-dichlorobenzene, and 1,1-dichloroethane were detected in one or more groundwater samples during this monitoring event; however, all of the reported concentrations of these constituents were less than their respective NCAC 2L groundwater quality standard. No other volatile organic compounds were detected in the monitoring wells sampled during this event.

5.2 Surface Water Analytical Results

There were no volatile organic constituents detected above the method detection limit in either of the stream sampling locations. The metal barium was detected in SW-1 at a reported concentration of 32.7 µg/L and in SW-2 at a reported concentration of 36.0 µg/L. However, both of these reported concentrations are below the 15A NCAC 2B Surface Water Standard set at 1000 µg/L for barium. There were no other metals detected above the method detection limit in the surface water samples during this sampling event.

5.3 Groundwater Flow Direction

The static water levels in the monitoring wells were measured on June 12, 2008. The depth to the water table ranged from 8.89 to 24.66 feet below the top of well casing on this date. Groundwater elevation data are presented in **Table 1**. Ground surface elevations were taken from surface topography illustrated on Plan Sheet No. 3 of the Caswell County Landfill Closure Plans prepared by Dewberry and Davis in March 1994. The groundwater elevation at each monitoring well was approximated by taking the difference of the ground surface elevation (topography) and the depth to static water in each monitoring well. A groundwater contour map was constructed using the calculated groundwater elevation data from the June 12, 2008 sampling event and is presented as **Figure 2**. The groundwater elevation data collected during this monitoring event indicates that the groundwater beneath the landfill generally flows easterly toward the unnamed tributary of Moon Creek.

5.4 Quality Assurance

The monitoring wells were sampled using new, sterile Teflon disposable bailers or new Teflon and silicon tubing. A Laboratory QC Method Blank was also analyzed for the Appendix I Volatile Organic Compounds as well as the RCRA 8 metals. The volatile organic compound 2-butanone was detected in the method blank, but was not detected in any of the associated samples. The results of the method blank and laboratory QC sample analyses are included in **Appendix B**.

5.5 Preliminary Analysis of Cause and Significance of 2L Exceedances

It is believed that the cause of the 2L exceedances within the hydrogeologic regime at the Caswell County Landfill is caused from percolation of landfill constituents from the waste management units into the uppermost groundwater aquifer.

S&ME Inc. reviewed the aerial photograph of the Caswell County Landfill and surrounding vicinity for the year 2000 as a preliminary analysis of the proximity of potential receptor water well users to the compliance monitoring wells in which 2L exceedances occurred during the June 2008 groundwater monitoring event. Based on the aerial photograph for the year 2000, the nearest suspect residential homes area located approximately 900 feet northeast of compliance monitoring well MW-5 which is the

furthest downgradient monitoring well on the landfill side of the unnamed tributary of Moon Creek. The observed suspect homes are topographically upgradient and on the other side of the unnamed tributary of Moon Creek from the Caswell County Landfill. At this time, S&ME has no information regarding the current use of groundwater as a potable water source for these homes, in the surrounding area.

Due to the detection of exceedances of the NCAC 2L groundwater quality standards in the compliance wells, S&ME recommends that a water supply well receptor survey be completed for the Caswell County Landfill and the development of plans to address the NCAC 2L exceedances.

6.0 REFERENCES

Fetter, C. W., 1988, Applied Hydrogeology, New York; Macmillian Publishing Company, 1988, 592 pp.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

TABLES

Table 1
Groundwater Elevation Data Summary (6/12/08)
Caswell County Landfill
Yanceyville, North Carolina
S&ME Project No. 1584-07-034

Static Water Levels				
Well No.	Surface Elevation (Topographic)	Depth of Well (feet)	June 12, 2008	
			DTGW (feet)	Elevation (feet)
MW-1	572	24.5	17.59	554.41
MW-2	526.5	22.3	20.21	506.29
MW-3	511	17.8	10.94	500.06
MW-4	526.5	36.0	24.66	501.84
MW-5	498	24.7	9.39	488.61
MW-6	489	16.2	8.89	480.11

*Topographic = ground elevation estimated from topographic map w/2 foot contour interval,
not a surveyed elevation*

Depth of well data as measured by S&ME Inc. personnel on date of sampling

DTGW = Depth to Groundwater

Elevation = calculated groundwater elevation

Table 2
Groundwater & Surface Water Field Data Summary (6-12-08)
Caswell County Landfill
Yanceyville, North Carolina
S&ME Project No. 1584-07-034

Location:	MW-1						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
0955	12-Jun-08	18.2	64.8	7.15	135	2	17.59
1000	12-Jun-08	18.6	65.5	7.17	120	2	

Location:	MW-2						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1030	12-Jun-08	18.0	64.4	7.09	140	2	20.21

Location:	MW-3						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1140	12-Jun-08	17.1	62.8	7.65	89	2	10.94
1145	12-Jun-08	16.0	60.8	7.01	67	1	
1150	12-Jun-08	16.0	60.8	6.93	66	1	
1155	12-Jun-08	15.8	60.4	6.91	65	1	
1200	12-Jun-08	16.0	60.8	6.86	66	1	

Location:	MW-4						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
NM	12-Jun-08	16.2	61.2	7.04	123	1	24.66
NM	12-Jun-08	16.4	61.5	6.86	129	1	
NM	12-Jun-08	16.7	62.1	7.06	129	3	

Location:	MW-5						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1222	12-Jun-08	18.7	65.7	7.47	126	3	9.39
1224	12-Jun-08	14.9	58.8	7.16	100	2	
1226	12-Jun-08	14.7	58.5	7.06	94	2	

Location:	MW-6						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
1312	12-Jun-08	17.1	62.78	7.98	21.1	1	8.89
1316	12-Jun-08	16.2	61.16	7.93	16.9	1	
1320	12-Jun-08	15.8	60.44	7.81	16.2	1	
1325	12-Jun-08	15.5	59.9	7.52	16.3	NM	

Location:	SW-1						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
NM	12-Jun-08	24.5	76.1	7.65	12.2	1	N/A

Location:	SW-2						
Time	Date	Temp-C	Temp-F	pH	SpC-mS/cm	Turbidity	Depth to Water-feet
NM	12-Jun-08	21.8	71.2	7.81	13.45	NM	N/A

N/A = Not Applicable

NM = Not Measured/recorded

Qualitative Turbidity; 1 = clear, 2 = slight, 3 = moderate, 4 = high

TABLE 3
GROUNDWATER ANALYTICAL RESULTS SUMMARY (6/12/08)
APPENDIX I - VOLATILE ORGANIC COMPOUNDS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Compound	Sample Locations					NC SWSL	NCAC 2L stds.
	MW-1	MW-2	MW-3	MW-4	MW-5		
Benzene	ND	2.1	ND	1.2	1	ND	1
Chlorobenzene	ND	24.9	5.4	12.3	4.2	ND	3
Chloroethane	ND	2.5	1.5	3.5	2.4	ND	50
1,4-Dichlorobenzene	ND	18.3	3.3	14.8	11.0	ND	2800
1,2-Dichlorobenzene	ND	2.5	ND	1.9	1.7	ND	1
1,1-Dichloroethane	ND	ND	ND	ND	1.0	ND	1.4
						5	24
						5	70

Reported concentrations = micrograms per liter ($\mu\text{g/L}$)

NC SWSL = North Carolina Solid Waste Section Limit

ND = Analyte not detected

NCAC 2L stds. = 15A North Carolina Administrative Code 2L .0200, GW Quality Standards for Class GA groundwater.

Yellow highlights indicate a measurement higher than the NC SWSL

Orange highlights indicate a measurement higher than 2L standards.

TABLE 4
GROUNDWATER ANALYTICAL RESULTS SUMMARY (6/12/08)
8-RCRA METALS

CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Constituent	Sample Locations					NC SWSL	NCAC 2L stds.
	MW-1	MW-2	MW-3	MW-4	MW-5		
Barium	47.6	104	68.0	51.3	67.5	15.4	100 2000
Cadmium	1.2	5.3	ND	ND	2.3	ND	1 1.75

all concentrations reported in micrograms per liter ($\mu\text{g/L}$)

NC SWSL = North Carolina Solid Waste Section Limit

ND = Analyte not detected

NCAC 2L stds. = ISA North Carolina Administrative Code 2L .0200, Groundwater Quality Standards for Class GA groundwater.

NS = no standard listed according to NCAC 2L

Yellow highlights indicate a measurement higher than the NC SWSL

Orange highlights indicate a measurement higher than 2L standards.

TABLE 5
SURFACE WATER ANALYTICAL RESULTS SUMMARY (6/12/08)
APPENDIX I - VOLATILE ORGANIC COMPOUNDS
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA
S&ME PROJECT NO. 1584-07-034

Compound	Sample Locations		NC SWSL	15A NCAC 2B Standards*
	SW-1	SW-2		
All Target Compounds	ND	ND	---	---

NC SWSL = North Carolina Solid Waste Section Limit

ND = compound not detected in sample

* = Title 15A NCAC 2B Standards for Class B, C surface water

J = Parameters are estimated values between the detection limit and the NC SWSL.

ns = Title 15A NCAC 2B provides no established standard for these constituents

Quantities highlighted in yellow were detected above the NC SWSL

Quantities highlighted in orange were detected above the 2B standards

TABLE 6

SURFACE WATER ANALYTICAL RESULTS SUMMARY (6/12/08)
 8-RCR METALS
 CASWELL COUNTY LANDFILL
 YANCEYVILLE, NORTH CAROLINA
 S&ME PROJECT NO. 1584-07-034

Constituent	Sample Locations		NC SWSL	15A NCAC 2B Standards*
	SW-1	SW-2		
Barium	32.7	36.0	100	1000

NC SWSL = North Carolina Solid Waste Section Limit

ND = Parameter not detected

* = Title 15A NCAC 2B Standards for Class B, C Surface Water

ns = Title 15A NCAC 2B provides no established standard for these constituents

Yellow highlights indicate a measurement higher than the NC SWSL

Orange highlights indicate a measurement higher than 2B standards.

NC DENR FORMATTED FIELD DATA TABLE

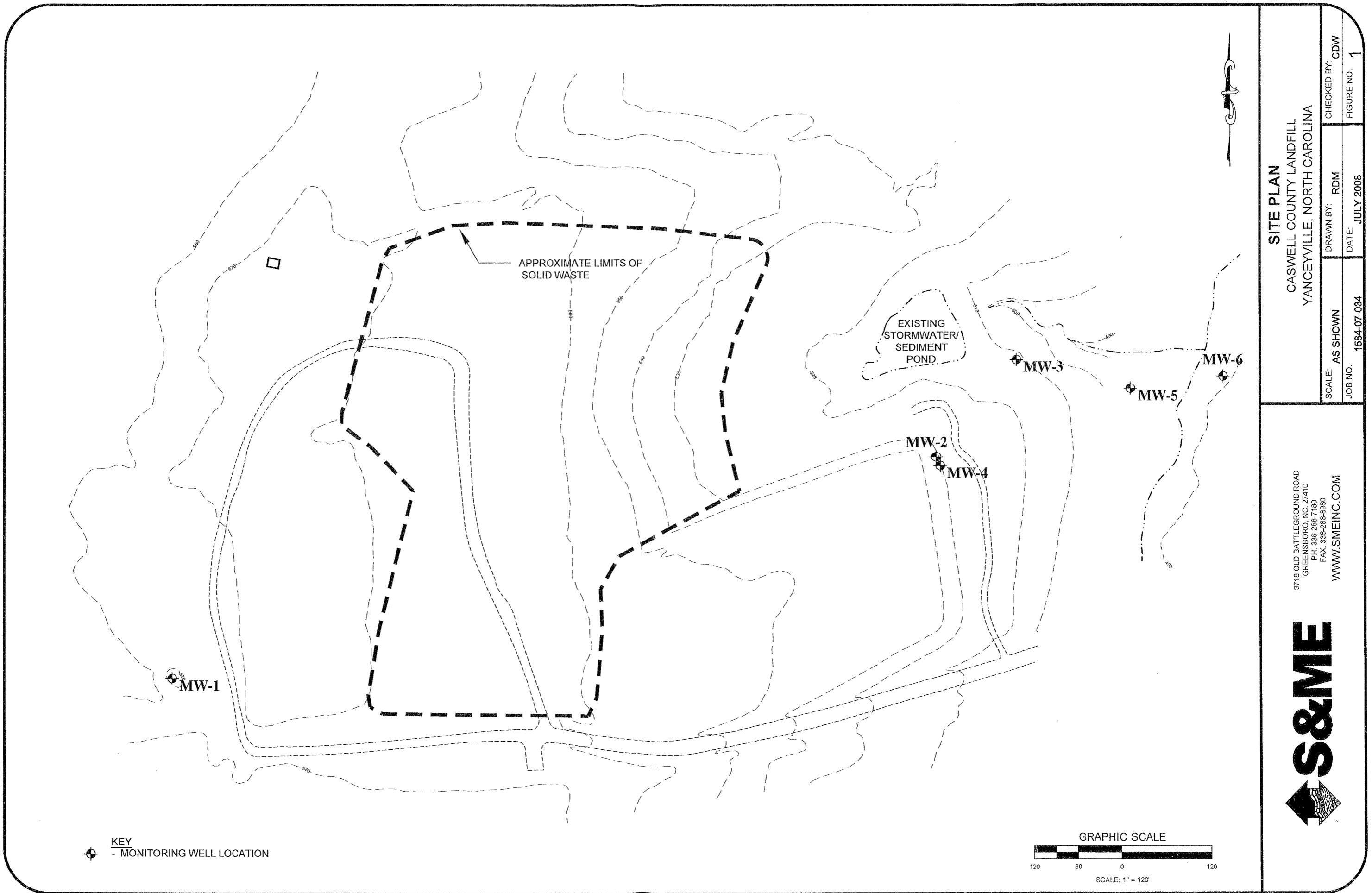
Monitoring Well Samples

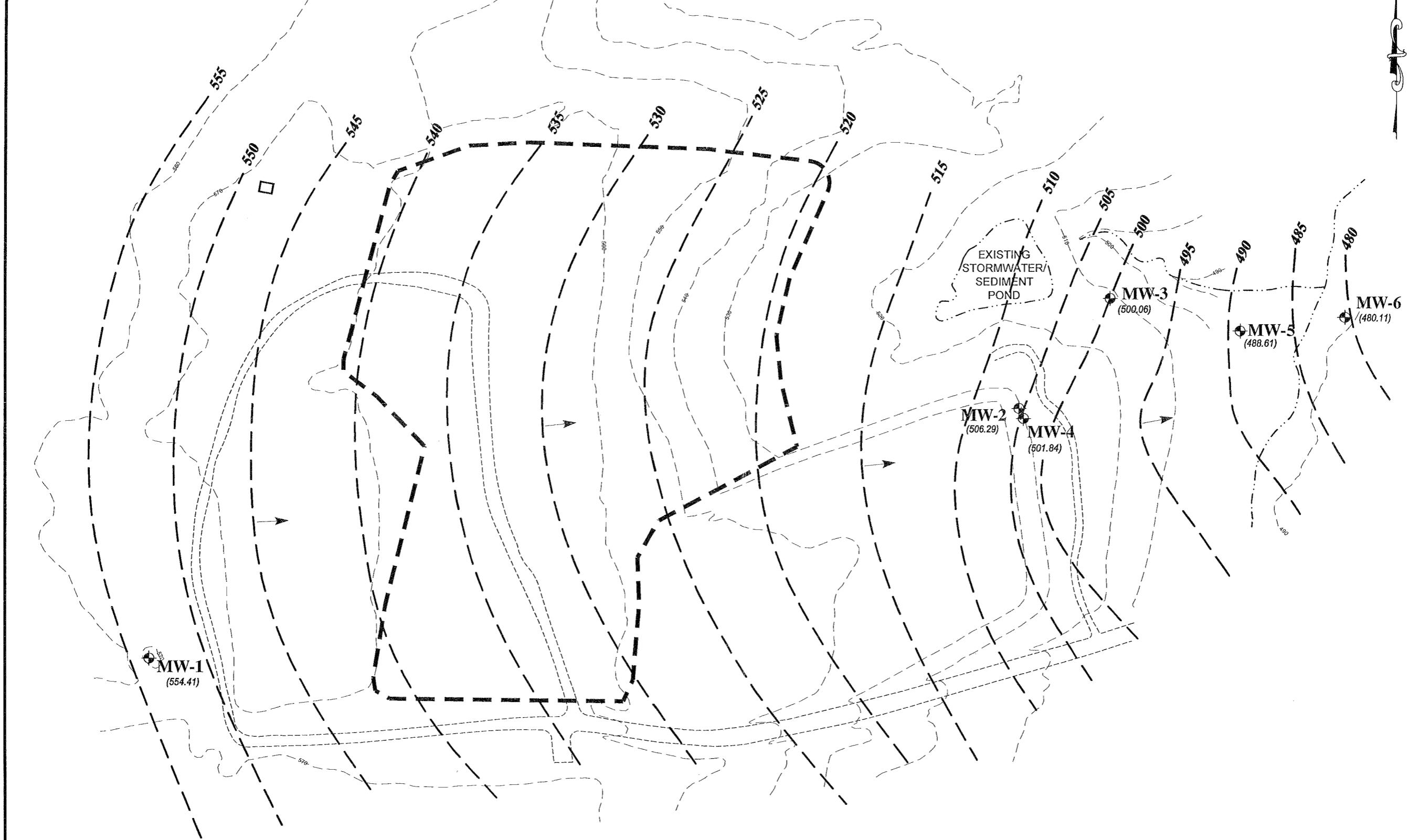
FACILITY PERMIT	WELL ID	SWS ID	CAS Number	PARAMETER	RESULT	UNITS	COLLECT DATE	Time of Sampling	Sampler(s)
	MW-1	318	318	DTW	17.59	feet	06/12/2008	1000	G. Simcox
	MW-1	320	320	pH	7.17	stu	06/12/2008	1000	G. Simcox
	MW-1	323	323	Specific Cond.	120	umhos/cm	06/12/2008	1000	G. Simcox
	MW-1	325	325	Temperature	18.6	oC	06/12/2008	1000	G. Simcox
	MW-2	318	318	DTW	20.21	feet	06/12/2008	1030	G. Simcox
	MW-2	320	320	pH	7.09	stu	06/12/2008	1030	G. Simcox
	MW-2	323	323	Specific Cond.	140	umhos/cm	06/12/2008	1030	G. Simcox
	MW-2	325	325	Temperature	18	oC	06/12/2008	1030	G. Simcox
	MW-3	318	318	DTW	10.94	feet	06/12/2008	1200	G. Simcox
	MW-3	320	320	pH	6.86	stu	06/12/2008	1200	G. Simcox
	MW-3	323	323	Specific Cond.	66	umhos/cm	06/12/2008	1200	G. Simcox
	MW-3	325	325	Temperature	16	oC	06/12/2008	1200	G. Simcox
	MW-4	318	318	DTW	24.66	feet	06/12/2008	NM	G. Simcox
	MW-4	320	320	pH	6.25	stu	06/12/2008	NM	G. Simcox
	MW-4	323	323	Specific Cond.	144	umhos/cm	06/12/2008	NM	G. Simcox
	MW-4	325	325	Temperature	15.55	oC	06/12/2008	NM	G. Simcox
	MW-5	318	318	DTW	9.39	feet	06/12/2008	1226	G. Simcox
	MW-5	320	320	pH	7.06	stu	06/12/2008	1226	G. Simcox
	MW-5	323	323	Specific Cond.	94	umhos/cm	06/12/2008	1226	G. Simcox
	MW-5	325	325	Temperature	14.7	oC	06/12/2008	1226	G. Simcox
	MW-6	318	318	DTW	8.89	feet	06/12/2008	1325	G. Simcox
	MW-6	320	320	pH	7.52	stu	06/12/2008	1325	G. Simcox
	MW-6	323	323	Specific Cond.	16.3	umhos/cm	06/12/2008	1325	G. Simcox
	MW-6	325	325	Temperature	15.5	oC	06/12/2008	1325	G. Simcox

Surface Water Samples

FACILITY PERMIT	WELL ID	SWS ID	CAS Number	PARAMETER	RESULT	UNITS	COLLECT DATE	Time of Sampling	Sampler(s)
	SW-1	318	318	DTW	NA	feet	06/12/2008	NM	G. Simcox
	SW-1	320	320	pH	7.65	stu	06/12/2008	NM	G. Simcox
	SW-1	323	323	Specific Cond.	12.2	umhos/cm	06/12/2008	NM	G. Simcox
	SW-1	325	325	Temperature	24.5	oC	06/12/2008	NM	G. Simcox
	SW-2	318	318	DTW	NA	feet	06/12/2008	NM	G. Simcox
	SW-2	320	320	pH	7.81	stu	06/12/2008	NM	G. Simcox
	SW-2	323	323	Specific Cond.	13.45	umhos/cm	06/12/2008	NM	G. Simcox
	SW-2	325	325	Temperature	21.8	oC	06/12/2008	NM	G. Simcox

FIGURES





KEY

- MONITORING WELL LOCATION
- GROUNDWATER CONTOUR
- (554.41) - GROUNDWATER ELEVATION MEASURED IN MONITORING WELL
- ← GROUNDWATER FLOW DIRECTION

GRAPHIC SCALE
120 60 0 120'
SCALE: 1" = 120'



3718 OLD BATTLEGROUND ROAD
GREENSBORO, NC 27410
PH: 336-288-7780
FAX: 336-288-8980
WWW.SMEINC.COM

GROUNDWATER CONTOUR MAP
CASWELL COUNTY LANDFILL
YANCEYVILLE, NORTH CAROLINA

CHECKED BY: CDW

FIGURE NO. 2

SCALE: AS SHOWN	DRAWN BY: RDM
JOB NO. 1584-07-034	DATE: JULY 2008

APPENDIX A

Groundwater Sampling Field Data Sheets



FIELD DATA SHEET FOR GROUNDWATER SAMPLING

三

DATE 6/12/88
FIELD PERSONNEL Gary Simcox
FACILITY NAME Cassville County Landfill
EPA ID NO.

CASING DIAMETER	<input type="checkbox"/> 2 INCHES	<input type="checkbox"/> 4 INCHES	
CASING MATERIAL	<input type="checkbox"/> PVC	<input type="checkbox"/> TEFILON	<input type="checkbox"/> STEEL
MEASURING POINT ELEVATION (MSL)			<input type="checkbox"/> 1/100 ft
WATER TABLE ELEVATION (MSL)			<input type="checkbox"/> 1/100 ft
PH/SPECIAL CONDITION METER CAL (DATE /TIME)			
PH BUFFER SOLUTION USED	<input type="checkbox"/> YES <input type="checkbox"/> NO		
STEEL GUARD PIPE AROUND CASING	<input type="checkbox"/> YES <input type="checkbox"/> NO		
LOCKING CAP	<input type="checkbox"/> YES <input type="checkbox"/> NO		
PROTECTIVE ABUTMENT	<input type="checkbox"/> YES <input type="checkbox"/> NO		
WELL INTEGRITY SATISFACTORY	<input type="checkbox"/> YES <input type="checkbox"/> NO		

תְּהִלָּה

UPGRADIENT	DOWNGRADIENT
WEATHER CONDITIONS AIR TEMPERATURE	BUN/THERM/PLATE CLOUDY/HOT F 55
TOTAL WELL DEPTH (TWD)	1/100 ft
DEPTH TO GROUNDWATER (DGW)	1/100 ft
LENGTH OF WATER COLUMN (LWC)	TWD - DGW = ft
1 CASING VOLUME (OCV) = LWC X	gal
3 CASING VOLUMES =	gal = STD EVACUATION TOTALS
METHOD OF WELL EVACUATION	SUBSTITUTED FOR/GEN 1 BAKER/B-X FORM
METHOD OF SAMPLE COLLECTION	DECIMATED R BAKER/GEN 1 BAKER/B-X FORM

104

FIELD ANALYSIS	VOLUME PURGED (gal.)	TIME (MILITARY)	PH (S.U.)	CONDUCTIVITY	WATER TEMP (C)	TURBIDITY (SUBJECTIVELY)

EDITOR (SUBJECTIVE) **



FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE 6/12/88
 FIELD PERSONNEL Carly Simon
 FACILITY NAME Cassette Company, Inc.
 EPA ID NO.
 WELL ID NO. SWS-2

UPGRADE
 DOWNGRADIENT

WEATHER CONDITIONS Partly cloudy/pink cloudy/overcast
 AIR TEMPERATURE 75° F

TOTAL WELL DEPTH (TWD) 1/100 ft
 DEPTH TO GROUNDWATER (DGW) 1/100 ft
 LENGTH OF WATER COLUMN (LWC) = TWD - DGW = ft
 1 Casing Volume (OCV) = LWC X gal
 3 Casing Volumes = gal = STD EVACUATION VOLUME
 METHOD OF WELL EVACUATION SUBMERSIBLE PUMP/GEL 1 BUNKE/B-X PUMP
 METHOD OF SAMPLE COLLECTION Standard 7 BUNKE/GR-T BUNKE/B-X BUNKE
 TOTAL VOLUME OF WATER REMOVED gal

CASING DIAMETER 2 INCHES 4 INCHES
 CASING MATERIAL PVC TEFILON STEEL
 MEASURING POINT ELEVATION (MSL) 1/100 ft
 WATER TABLE ELEVATION (MSL) 1/100 ft
 PH/SPECIAL CONDITION METER CAL (DATE/TIME)
 PH BUFFER SOLUTION USED
 STEEL GUARD PIPE AROUND CASING YES NO
 LOCKING CAP YES NO
 PROTECTIVE ABUTMENT YES NO
 WELL INTEGRITY SATISFACTORY
 WELL YIELD LOW MODERATE HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERVANT	PARAMETER
Carly Simon	6/12/88	1245	4			

FIELD ANALYSIS

VOLUME PURGED (gal)
 TIME (MILITARY)
 pH (S.U.)
 CONDUCTIVITY
 WATER TEMP (C)
 TURBIDITY (SUBJECTIVE)*
 ODOR (SUBJECTIVE)**

* (1) clear (2) slightly (3) moderate (4) high
 ** (1) none (2) faint (3) moderate (4) high

14:24	13:45					
22:07	21:38					



FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE 6/12/88
 FIELD PERSONNEL Gary Simcox
 FACILITY NAME Cassell County Landfill
 EPA ID NO.
 WELL ID NO. MW-3

UPGRADE DOWNGRADIENT
 WEATHER CONDITIONS BART/CLAY/RED/BROWN CLAY/WHITE
 AIR TEMPERATURE 80 °F
 TOTAL WELL DEPTH (TWD) 17.8 ft
 DEPTH TO GROUNDWATER (DGW) 10.94 ft
 LENGTH OF WATER COLUMN (LWC) = TWD - DGW = 6.85 ft
 1 Casing Volume (OCV) = $LWC \times \pi r^2 = 1.16$ gal
 3 Casing Volumes = $1.16 \times 3 = 3.48$ gal
CL = STD EVACUATION VOLUME
 METHOD OF WELL EVACUATION SUBMERSIBLE PUMP/GR. 1 BAKER/B-X PUMP
 METHOD OF SAMPLE COLLECTION DEELEDGE PUMP/GR. 1 BAKER/B-X PUMP
 TOTAL VOLUME OF WATER REMOVED gal

CASING DIAMETER 2 INCHES 4 INCHES
 CASING MATERIAL PVC TEFLON STEEL
 MEASURING POINT ELEVATION (MSL) 1/100 ft
 WATER TABLE ELEVATION (MSL) 1/100 ft
 PH/SPECIAL CONDITION METER CAL (DATE/TIME)
 PH BUFFER SOLUTION USED
 STEEL GUARD PIPE AROUND CASING YES NO
 LOCKING CAP YES NO
 PROTECTIVE ABUTMENT YES NO
 WELL INTEGRITY SATISFACTORY LOW HIGH
 WELL YIELD LOW HIGH

FIELD ANALYSIS

VOLUME PURGED (LITER)	1	2	3	4	5	
TIME (MILITARY)	1640	1645	1650	1655	1700	
pH (S.U.)	7.65	7.01	6.93	6.91	6.86	
CONDUCTIVITY	89	67	64	55	66	
WATER TEMP (C)	17.1	16.0	16.0	15.8	16.0	
TURBIDITY (SUBJECTIVE)*	2	1	1	1	1	
ODOR (SUBJECTIVE)**						

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high

CONTAINERS						
PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV.	PALIOMETER
Gary Simcox	6/12/88	1200	4			

Permeable Filter



FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE 6/12/08
 FIELD PERSONNEL Gary Simon
 FACILITY NAME Caswell County Landfill
 EPA ID NO.
 WELL ID NO. M14-5

UPGRADE DOWNGRADIENT
 WEATHER CONDITIONS Partly cloudy/partly cloudy/overcast
 AIR TEMPERATURE 85 °F
 TOTAL WELL DEPTH (TWD) 24.7 ft
 DEPTH TO GROUNDWATER (DGW) 9.3 ft
 LENGTH OF WATER COLUMN (LWC) = TWD - DGW = 15.4 ft
 1 Casing Volume (OCV) = LWC X .17 = 2.6 gal
 3 Casing Volumes = $\frac{2.6}{7.8}$ gal = std extraction volume
 METHOD OF WELL EVACUATION Submersible pump/B-X pump
 METHOD OF SAMPLE COLLECTION PUMPED IN BAUER/GET BAUER/B-X pump
 TOTAL VOLUME OF WATER REMOVED 1 gal

CASING DIAMETER 2 INCHES 4 INCHES
 CASING MATERIAL PVC TEFLON STEEL
 MEASURING POINT ELEVATION (MSL) 1/100 ft
 WATER TABLE ELEVATION (MSL) 1/100 ft
 PH/SPECIAL CONDITION METER CAL (DATE/TIME)
 PH BUFFER SOLUTION USED
 STEEL GUARD PIPE AROUND CASTING YES NO
 LOCKING CAP YES NO
 PROTECTIVE ABUTMENT YES NO
 WELL INTEGRITY SATISFACTORY YES NO
 WELL YIELD LOW MEDIUM HIGH

CONTAINERS

PERSONNEL	DATE	TIME	NO.	TYPE	PRESERV.	PARAMETER
Caesar	6/12/08	12:30	4			

Wells: Pump w/ Baro Valve

FIELD ANALYSIS

VOLUME PURGED (gal)
 TIME (MILITARY)
 pH (S.U.)
 CONDUCTIVITY
 WATER TEMP (C)
 TURBIDITY (SUBJECTIVE)*
 ODOR (SUBJECTIVE)**

DRY & 3.5 Gallons						
c	1	2	3	4	5	6
1220	1222	1224	1226	1228	1230	
7.47	7.16	7.06	7.06			
126	100	94				
18.7	14.9	14.7				
3	2	2				

* (1) clear (2) slight (3) moderate (4) high ** (1) none (2) faint (3) moderate (4) high



FIELD DATA SHEET FOR GROUNDWATER SAMPLING

DATE 6/12/08
 FIELD PERSONNEL Gary Simon
 FACILITY NAME CASWELL COUNTY LANDFILL
 EPA ID NO.
 WELL ID NO. MW-6

UPGRADE

WEATHER CONDITIONS Partly cloudy/hot
 AIR TEMPERATURE 85 °F
 TOTAL WELL DEPTH (TWD) 16.2 ft
 DEPTH TO GROUNDWATER (DGW) 8.89 ft
 LENGTH OF WATER COLUMN (LWC) = TWD - DGW = 7.3 ft
 1 Casing Volume (OCV) = LWC X .17 = 1.24 gal
 3 Casing Volumes = .37 gal = STD EVACUATION VOLUME
 METHOD OF WELL EVACUATION SUBMERSIBLE PUMP/GR. 1 BAUER/B-X PUMP
 METHOD OF SAMPLE COLLECTION DECANTED & BAUER/BAUER/B-X BAUER
 TOTAL VOLUME OF WATER REMOVED gal

CASTING DIAMETER	<input checked="" type="checkbox"/> 2 INCHES	<input type="checkbox"/> 4 INCHES				
CASTING MATERIAL	<input checked="" type="checkbox"/> PVC	<input type="checkbox"/> TEFILON				
MEASURING POINT ELEVATION (MSL)	<u>1/100 ft</u>					
WATER TABLE ELEVATION (MSL)	<u>1/100 ft</u>					
pH/SPECIAL CONDITION METER CAL (DATE/TIME)						
PH BUFFER SOLUTION USED	<input checked="" type="checkbox"/> 10K					
STEEL GUARD PIPE AROUND CASING	<input checked="" type="checkbox"/> 10K					
LOCKING CAP	<input checked="" type="checkbox"/> 10K					
PROTECTIVE ABUTMENT	<input type="checkbox"/> 10K					
WELL INTEGRITY SATISFACTORY	<input type="checkbox"/> 10K					
WELL YIELD	<input type="checkbox"/> low	<input checked="" type="checkbox"/> medium				
CONTAINERS						
PERSONNEL	DATE	TIME	NO.	TIPS	FRESH	PARTICLE
Gary Simon	6/12/08	1330	4			

FIELD ANALYSIS

VOLUME PURGED 0.05 LITRE
 TIME (MILITARY)
 pH (S.U.)
 CONDUCTIVITY
 WATER TEMP (C)
 TURBIDITY (SUBJECTIVE)*
 ODOR (SUBJECTIVE)**

	0	1	2	3	4	5	6
1310	1312	1314	1320	1325			
7.28	7.23	7.21	7.19	7.52			
21.1	16.9	16.2	16.1				
17.1	16.7	15.8	15.5	16.3			
1	1	1	1	1			

* (1) clear (2) slight (3) moderate (4) high
 ** (1) none (2) faint (3) moderate (4) high

APPENDIX B

Laboratory Analytical Reports



Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

June 25, 2008

Mr. Connel Ware
S&ME, Inc.
3718 Old Battleground Road
Greensboro, NC 27410

RE: Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Dear Mr. Ware:

Enclosed are the analytical results for sample(s) received by the laboratory on June 13, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that appears to read "Kevin Herring".

Kevin Herring

kevin.herring@pacelabs.com
Project Manager

Enclosures

cc: Wayne Watterson, S&ME, Inc.

REPORT OF LABORATORY ANALYSIS

Page 1 of 29

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(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Charlotte Certification IDs

Florida/NELAP Certification Number: E87627
Kansas Certification Number: E-10364
Louisiana/LELAP Certification Number: 04034
North Carolina Drinking Water Certification Number: 37706
North Carolina Wastewater Certification Number: 12

North Carolina Field Services Certification Number: 5342
South Carolina Certification Number: 990060001
South Carolina Bioassay Certification Number: 990060003
Tennessee Certification Number: 04010
Virginia Certification Number: 00213

Asheville Certification IDs

Florida/NELAP Certification Number: E87648
Louisiana/LELAP Certification Number: 03095
New Jersey Certification Number: NC011
North Carolina Drinking Water Certification Number: 37712
North Carolina Wastewater Certification Number: 40
North Carolina Bioassay Certification Number: 9

Pennsylvania Certification Number: 68-03578
South Carolina Certification Number: 99030001
South Carolina Bioassay Certification Number: 99030002
Tennessee Certification Number: 2980
Virginia Certification Number: 00072

Eden Certification IDs

North Carolina Drinking Water Certification Number: 37738
Virginia Drinking Water Certification Number: 00424

North Carolina Wastewater Certification Number: 633

REPORT OF LABORATORY ANALYSIS

Page 2 of 29

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: SW-1	Lab ID: 9221424001	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 16:53	7440-38-2	
Barium	32.7 ug/L		5.0	1	06/18/08 17:15	06/19/08 16:53	7440-39-3	
Cadmium	ND ug/L		1.0	1	06/18/08 17:15	06/19/08 16:53	7440-43-9	
Chromium	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 16:53	7440-47-3	
Lead	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 16:53	7439-92-1	
Selenium	ND ug/L		10.0	1	06/18/08 17:15	06/19/08 16:53	7782-49-2	
Silver	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 16:53	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	06/16/08 10:25	06/16/08 14:01	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1	06/17/08 20:38	67-64-1		
Acrylonitrile	ND ug/L		10.0	1	06/17/08 20:38	107-13-1		
Benzene	ND ug/L		1.0	1	06/17/08 20:38	71-43-2		
Bromochloromethane	ND ug/L		1.0	1	06/17/08 20:38	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	06/17/08 20:38	75-27-4		
Bromoform	ND ug/L		1.0	1	06/17/08 20:38	75-25-2		
Bromomethane	ND ug/L		5.0	1	06/17/08 20:38	74-83-9		
2-Butanone (MEK)	ND ug/L		5.0	1	06/17/08 20:38	78-93-3		
Carbon disulfide	ND ug/L		2.0	1	06/17/08 20:38	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1	06/17/08 20:38	56-23-5		
Chlorobenzene	ND ug/L		1.0	1	06/17/08 20:38	108-90-7		
Chloroethane	ND ug/L		1.0	1	06/17/08 20:38	75-00-3		
Chloroform	ND ug/L		1.0	1	06/17/08 20:38	67-66-3		
Chloromethane	ND ug/L		1.0	1	06/17/08 20:38	74-87-3		
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1	06/17/08 20:38	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	06/17/08 20:38	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	06/17/08 20:38	106-93-4		
Dibromomethane	ND ug/L		1.0	1	06/17/08 20:38	74-95-3		
1,2-Dichlorobenzene	ND ug/L		1.0	1	06/17/08 20:38	95-50-1		
1,4-Dichlorobenzene	ND ug/L		1.0	1	06/17/08 20:38	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1	06/17/08 20:38	110-57-6		
1,1-Dichloroethane	ND ug/L		1.0	1	06/17/08 20:38	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1	06/17/08 20:38	107-06-2		
1,1-Dichloroethene	ND ug/L		1.0	1	06/17/08 20:38	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1	06/17/08 20:38	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1	06/17/08 20:38	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1	06/17/08 20:38	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		1.0	1	06/17/08 20:38	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1	06/17/08 20:38	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1	06/17/08 20:38	100-41-4		
2-Hexanone	ND ug/L		5.0	1	06/17/08 20:38	591-78-6		
Iodomethane	ND ug/L		5.0	1	06/17/08 20:38	74-88-4		
Methylene Chloride	ND ug/L		2.0	1	06/17/08 20:38	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1	06/17/08 20:38	108-10-1		

Date: 06/25/2008 02:48 PM

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
2225 Riverside Dr.
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9800 Kincey Ave. Suite 100
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(704)875-9092

ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: SW-1	Lab ID: 9221424001	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Styrene	ND ug/L		1.0	1		06/17/08 20:38	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		06/17/08 20:38	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		06/17/08 20:38	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		06/17/08 20:38	127-18-4	
Toluene	ND ug/L		1.0	1		06/17/08 20:38	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		06/17/08 20:38	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		06/17/08 20:38	79-00-5	
Trichloroethene	ND ug/L		1.0	1		06/17/08 20:38	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		06/17/08 20:38	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		06/17/08 20:38	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		06/17/08 20:38	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		06/17/08 20:38	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		06/17/08 20:38	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		06/17/08 20:38	1330-20-7	
o-Xylene	ND ug/L		1.0	1		06/17/08 20:38	95-47-6	
4-Bromofluorobenzene (S)	103 %		87-109	1		06/17/08 20:38	460-00-4	
Dibromofluoromethane (S)	91 %		85-115	1		06/17/08 20:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	93 %		79-120	1		06/17/08 20:38	17060-07-0	
Toluene-d8 (S)	98 %		70-120	1		06/17/08 20:38	2037-26-5	

Date: 06/25/2008 02:48 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: SW-2	Lab ID: 9221424002	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:09	7440-38-2	
Barium	36.0 ug/L		5.0	1	06/18/08 17:15	06/19/08 17:09	7440-39-3	
Cadmium	ND ug/L		1.0	1	06/18/08 17:15	06/19/08 17:09	7440-43-9	
Chromium	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:09	7440-47-3	
Lead	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:09	7439-92-1	
Selenium	ND ug/L		10.0	1	06/18/08 17:15	06/19/08 17:09	7782-49-2	
Silver	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:09	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	06/16/08 10:25	06/16/08 14:01	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1	06/17/08 21:02	67-64-1		
Acrylonitrile	ND ug/L		10.0	1	06/17/08 21:02	107-13-1		
Benzene	ND ug/L		1.0	1	06/17/08 21:02	71-43-2		
Bromochloromethane	ND ug/L		1.0	1	06/17/08 21:02	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	06/17/08 21:02	75-27-4		
Bromoform	ND ug/L		1.0	1	06/17/08 21:02	75-25-2		
Bromomethane	ND ug/L		5.0	1	06/17/08 21:02	74-83-9		
2-Butanone (MEK)	ND ug/L		5.0	1	06/17/08 21:02	78-93-3		
Carbon disulfide	ND ug/L		2.0	1	06/17/08 21:02	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1	06/17/08 21:02	56-23-5		
Chlorobenzene	ND ug/L		1.0	1	06/17/08 21:02	108-90-7		
Chloroethane	ND ug/L		1.0	1	06/17/08 21:02	75-00-3		
Chloroform	ND ug/L		1.0	1	06/17/08 21:02	67-66-3		
Chloromethane	ND ug/L		1.0	1	06/17/08 21:02	74-87-3		
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1	06/17/08 21:02	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	06/17/08 21:02	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	06/17/08 21:02	106-93-4		
Dibromomethane	ND ug/L		1.0	1	06/17/08 21:02	74-95-3		
1,2-Dichlorobenzene	ND ug/L		1.0	1	06/17/08 21:02	95-50-1		
1,4-Dichlorobenzene	ND ug/L		1.0	1	06/17/08 21:02	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1	06/17/08 21:02	110-57-6		
1,1-Dichloroethane	ND ug/L		1.0	1	06/17/08 21:02	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1	06/17/08 21:02	107-06-2		
1,1-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:02	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:02	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:02	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1	06/17/08 21:02	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		1.0	1	06/17/08 21:02	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1	06/17/08 21:02	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1	06/17/08 21:02	100-41-4		
2-Hexanone	ND ug/L		5.0	1	06/17/08 21:02	591-78-6		
Iodomethane	ND ug/L		5.0	1	06/17/08 21:02	74-88-4		
Methylene Chloride	ND ug/L		2.0	1	06/17/08 21:02	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1	06/17/08 21:02	108-10-1		

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0

Pace Project No.: 9221424

Sample: SW-2	Lab ID: 9221424002	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Styrene	ND ug/L		1.0	1		06/17/08 21:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		06/17/08 21:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		06/17/08 21:02	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		06/17/08 21:02	127-18-4	
Toluene	ND ug/L		1.0	1		06/17/08 21:02	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		06/17/08 21:02	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		06/17/08 21:02	79-00-5	
Trichloroethene	ND ug/L		1.0	1		06/17/08 21:02	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		06/17/08 21:02	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		06/17/08 21:02	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		06/17/08 21:02	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		06/17/08 21:02	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		06/17/08 21:02	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		06/17/08 21:02	1330-20-7	
o-Xylene	ND ug/L		1.0	1		06/17/08 21:02	95-47-6	
4-Bromofluorobenzene (S)	103 %		87-109	1		06/17/08 21:02	460-00-4	
Dibromofluoromethane (S)	92 %		85-115	1		06/17/08 21:02	1868-53-7	
1,2-Dichloroethane-d4 (S)	93 %		79-120	1		06/17/08 21:02	17060-07-0	
Toluene-d8 (S)	99 %		70-120	1		06/17/08 21:02	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-1	Lab ID: 9221424003	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:17	7440-38-2	
Barium	47.6 ug/L		5.0	1	06/18/08 17:15	06/19/08 17:17	7440-39-3	
Cadmium	1.2 ug/L		1.0	1	06/18/08 17:15	06/19/08 17:17	7440-43-9	
Chromium	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:17	7440-47-3	
Lead	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:17	7439-92-1	
Selenium	ND ug/L		10.0	1	06/18/08 17:15	06/19/08 17:17	7782-49-2	
Silver	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:17	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	06/16/08 10:25	06/16/08 14:01	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1	06/17/08 21:25	67-64-1		
Acrylonitrile	ND ug/L		10.0	1	06/17/08 21:25	107-13-1		
Benzene	ND ug/L		1.0	1	06/17/08 21:25	71-43-2		
Bromochloromethane	ND ug/L		1.0	1	06/17/08 21:25	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	06/17/08 21:25	75-27-4		
Bromoform	ND ug/L		1.0	1	06/17/08 21:25	75-25-2		
Bromomethane	ND ug/L		5.0	1	06/17/08 21:25	74-83-9		
2-Butanone (MEK)	ND ug/L		5.0	1	06/17/08 21:25	78-93-3		
Carbon disulfide	ND ug/L		2.0	1	06/17/08 21:25	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1	06/17/08 21:25	56-23-5		
Chlorobenzene	ND ug/L		1.0	1	06/17/08 21:25	108-90-7		
Chloroethane	ND ug/L		1.0	1	06/17/08 21:25	75-00-3		
Chloroform	ND ug/L		1.0	1	06/17/08 21:25	67-66-3		
Chloromethane	ND ug/L		1.0	1	06/17/08 21:25	74-87-3		
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1	06/17/08 21:25	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	06/17/08 21:25	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	06/17/08 21:25	106-93-4		
Dibromomethane	ND ug/L		1.0	1	06/17/08 21:25	74-95-3		
1,2-Dichlorobenzene	ND ug/L		1.0	1	06/17/08 21:25	95-50-1		
1,4-Dichlorobenzene	ND ug/L		1.0	1	06/17/08 21:25	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1	06/17/08 21:25	110-57-6		
1,1-Dichloroethane	ND ug/L		1.0	1	06/17/08 21:25	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1	06/17/08 21:25	107-06-2		
1,1-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:25	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:25	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:25	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1	06/17/08 21:25	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		1.0	1	06/17/08 21:25	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1	06/17/08 21:25	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1	06/17/08 21:25	100-41-4		
2-Hexanone	ND ug/L		5.0	1	06/17/08 21:25	591-78-6		
Iodomethane	ND ug/L		5.0	1	06/17/08 21:25	74-88-4		
Methylene Chloride	ND ug/L		2.0	1	06/17/08 21:25	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1	06/17/08 21:25	108-10-1		

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-1	Lab ID: 9221424003	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Styrene	ND ug/L		1.0	1		06/17/08 21:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		06/17/08 21:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		06/17/08 21:25	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		06/17/08 21:25	127-18-4	
Toluene	ND ug/L		1.0	1		06/17/08 21:25	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		06/17/08 21:25	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		06/17/08 21:25	79-00-5	
Trichloroethene	ND ug/L		1.0	1		06/17/08 21:25	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		06/17/08 21:25	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		06/17/08 21:25	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		06/17/08 21:25	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		06/17/08 21:25	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		06/17/08 21:25	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		06/17/08 21:25	1330-20-7	
o-Xylene	ND ug/L		1.0	1		06/17/08 21:25	95-47-6	
4-Bromofluorobenzene (S)	102 %		87-109	1		06/17/08 21:25	460-00-4	
Dibromofluoromethane (S)	91 %		85-115	1		06/17/08 21:25	1868-53-7	
1,2-Dichloroethane-d4 (S)	92 %		79-120	1		06/17/08 21:25	17060-07-0	
Toluene-d8 (S)	99 %		70-120	1		06/17/08 21:25	2037-26-5	

ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
 Pace Project No.: 9221424

Sample: MW-2	Lab ID: 9221424004	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:21	7440-38-2	
Barium	104 ug/L		5.0	1	06/18/08 17:15	06/19/08 17:21	7440-39-3	
Cadmium	5.3 ug/L		1.0	1	06/18/08 17:15	06/19/08 17:21	7440-43-9	
Chromium	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:21	7440-47-3	
Lead	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:21	7439-92-1	
Selenium	ND ug/L		10.0	1	06/18/08 17:15	06/19/08 17:21	7782-49-2	
Silver	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:21	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	06/16/08 10:25	06/16/08 14:01	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1	06/17/08 21:49	67-64-1		
Acrylonitrile	ND ug/L		10.0	1	06/17/08 21:49	107-13-1		
Benzene	2.1 ug/L		1.0	1	06/17/08 21:49	71-43-2		
Bromochloromethane	ND ug/L		1.0	1	06/17/08 21:49	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	06/17/08 21:49	75-27-4		
Bromoform	ND ug/L		1.0	1	06/17/08 21:49	75-25-2		
Bromomethane	ND ug/L		5.0	1	06/17/08 21:49	74-83-9		
2-Butanone (MEK)	ND ug/L		5.0	1	06/17/08 21:49	78-93-3		
Carbon disulfide	ND ug/L		2.0	1	06/17/08 21:49	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1	06/17/08 21:49	56-23-5		
Chlorobenzene	24.9 ug/L		1.0	1	06/17/08 21:49	108-90-7		
Chloroethane	2.5 ug/L		1.0	1	06/17/08 21:49	75-00-3		
Chloroform	ND ug/L		1.0	1	06/17/08 21:49	67-66-3		
Chloromethane	ND ug/L		1.0	1	06/17/08 21:49	74-87-3		
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1	06/17/08 21:49	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	06/17/08 21:49	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	06/17/08 21:49	106-93-4		
Dibromomethane	ND ug/L		1.0	1	06/17/08 21:49	74-95-3		
1,2-Dichlorobenzene	2.5 ug/L		1.0	1	06/17/08 21:49	95-50-1		
1,4-Dichlorobenzene	18.3 ug/L		1.0	1	06/17/08 21:49	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1	06/17/08 21:49	110-57-6		
1,1-Dichloroethane	ND ug/L		1.0	1	06/17/08 21:49	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1	06/17/08 21:49	107-06-2		
1,1-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:49	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:49	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1	06/17/08 21:49	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1	06/17/08 21:49	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		1.0	1	06/17/08 21:49	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1	06/17/08 21:49	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1	06/17/08 21:49	100-41-4		
2-Hexanone	ND ug/L		5.0	1	06/17/08 21:49	591-78-6		
Iodomethane	ND ug/L		5.0	1	06/17/08 21:49	74-88-4		
Methylene Chloride	ND ug/L		2.0	1	06/17/08 21:49	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1	06/17/08 21:49	108-10-1		

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-2	Lab ID: 9221424004	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Styrene	ND	ug/L	1.0	1	06/17/08 21:49	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1	06/17/08 21:49	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	06/17/08 21:49	79-34-5		
Tetrachloroethene	ND	ug/L	1.0	1	06/17/08 21:49	127-18-4		
Toluene	ND	ug/L	1.0	1	06/17/08 21:49	108-88-3		
1,1,1-Trichloroethane	ND	ug/L	1.0	1	06/17/08 21:49	71-55-6		
1,1,2-Trichloroethane	ND	ug/L	1.0	1	06/17/08 21:49	79-00-5		
Trichloroethene	ND	ug/L	1.0	1	06/17/08 21:49	79-01-6		
Trichlorofluoromethane	ND	ug/L	1.0	1	06/17/08 21:49	75-69-4		
1,2,3-Trichloropropane	ND	ug/L	1.0	1	06/17/08 21:49	96-18-4		
Vinyl acetate	ND	ug/L	2.0	1	06/17/08 21:49	108-05-4		
Vinyl chloride	ND	ug/L	1.0	1	06/17/08 21:49	75-01-4		
Xylene (Total)	ND	ug/L	3.0	1	06/17/08 21:49	1330-20-7		
m&p-Xylene	ND	ug/L	2.0	1	06/17/08 21:49	1330-20-7		
o-Xylene	ND	ug/L	1.0	1	06/17/08 21:49	95-47-6		
4-Bromofluorobenzene (S)	103 %		87-109	1	06/17/08 21:49	460-00-4		
Dibromofluoromethane (S)	92 %		85-115	1	06/17/08 21:49	1868-53-7		
1,2-Dichloroethane-d4 (S)	94 %		79-120	1	06/17/08 21:49	17060-07-0		
Toluene-d8 (S)	99 %		70-120	1	06/17/08 21:49	2037-26-5		

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0

Pace Project No.: 9221424

Sample: MW-3	Lab ID: 9221424005	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:26	7440-38-2	
Barium	68.0 ug/L		5.0	1	06/18/08 17:15	06/19/08 17:26	7440-39-3	
Cadmium	ND ug/L		1.0	1	06/18/08 17:15	06/19/08 17:26	7440-43-9	
Chromium	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:26	7440-47-3	
Lead	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:26	7439-92-1	
Selenium	ND ug/L		10.0	1	06/18/08 17:15	06/19/08 17:26	7782-49-2	
Silver	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:26	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	06/16/08 10:25	06/16/08 14:01	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1	06/18/08 18:25	67-64-1		
Acrylonitrile	ND ug/L		10.0	1	06/18/08 18:25	107-13-1		
Benzene	ND ug/L		1.0	1	06/18/08 18:25	71-43-2		
Bromochloromethane	ND ug/L		1.0	1	06/18/08 18:25	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	06/18/08 18:25	75-27-4		
Bromoform	ND ug/L		1.0	1	06/18/08 18:25	75-25-2		
Bromomethane	ND ug/L		5.0	1	06/18/08 18:25	74-83-9		
2-Butanone (MEK)	ND ug/L		5.0	1	06/18/08 18:25	78-93-3		
Carbon disulfide	ND ug/L		2.0	1	06/18/08 18:25	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1	06/18/08 18:25	56-23-5		
Chlorobenzene	5.4 ug/L		1.0	1	06/18/08 18:25	108-90-7		
Chloroethane	1.5 ug/L		1.0	1	06/18/08 18:25	75-00-3		
Chloroform	ND ug/L		1.0	1	06/18/08 18:25	67-66-3		
Chloromethane	ND ug/L		1.0	1	06/18/08 18:25	74-87-3		
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1	06/18/08 18:25	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	06/18/08 18:25	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	06/18/08 18:25	106-93-4		
Dibromomethane	ND ug/L		1.0	1	06/18/08 18:25	74-95-3		
1,2-Dichlorobenzene	ND ug/L		1.0	1	06/18/08 18:25	95-50-1		
1,4-Dichlorobenzene	3.3 ug/L		1.0	1	06/18/08 18:25	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1	06/18/08 18:25	110-57-6		
1,1-Dichloroethane	ND ug/L		1.0	1	06/18/08 18:25	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1	06/18/08 18:25	107-06-2		
1,1-Dichloroethene	ND ug/L		1.0	1	06/18/08 18:25	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1	06/18/08 18:25	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1	06/18/08 18:25	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1	06/18/08 18:25	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		1.0	1	06/18/08 18:25	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1	06/18/08 18:25	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1	06/18/08 18:25	100-41-4		
2-Hexanone	ND ug/L		5.0	1	06/18/08 18:25	591-78-6		
Iodomethane	ND ug/L		5.0	1	06/18/08 18:25	74-88-4		
Methylene Chloride	ND ug/L		2.0	1	06/18/08 18:25	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1	06/18/08 18:25	108-10-1		

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-3	Lab ID: 9221424005	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Styrene	ND	ug/L	1.0	1	06/18/08 18:25	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1	06/18/08 18:25	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	06/18/08 18:25	79-34-5		
Tetrachloroethene	ND	ug/L	1.0	1	06/18/08 18:25	127-18-4		
Toluene	ND	ug/L	1.0	1	06/18/08 18:25	108-88-3		
1,1,1-Trichloroethane	ND	ug/L	1.0	1	06/18/08 18:25	71-55-6		
1,1,2-Trichloroethane	ND	ug/L	1.0	1	06/18/08 18:25	79-00-5		
Trichloroethene	ND	ug/L	1.0	1	06/18/08 18:25	79-01-6		
Trichlorofluoromethane	ND	ug/L	1.0	1	06/18/08 18:25	75-69-4		
1,2,3-Trichloropropane	ND	ug/L	1.0	1	06/18/08 18:25	96-18-4		
Vinyl acetate	ND	ug/L	2.0	1	06/18/08 18:25	108-05-4		
Vinyl chloride	ND	ug/L	1.0	1	06/18/08 18:25	75-01-4		
Xylene (Total)	ND	ug/L	3.0	1	06/18/08 18:25	1330-20-7		
m&p-Xylene	ND	ug/L	2.0	1	06/18/08 18:25	1330-20-7		
o-Xylene	ND	ug/L	1.0	1	06/18/08 18:25	95-47-6		
4-Bromofluorobenzene (S)	99 %		87-109	1	06/18/08 18:25	460-00-4		
Dibromofluoromethane (S)	99 %		85-115	1	06/18/08 18:25	1868-53-7		
1,2-Dichloroethane-d4 (S)	98 %		79-120	1	06/18/08 18:25	17060-07-0		
Toluene-d8 (S)	99 %		70-120	1	06/18/08 18:25	2037-26-5		

ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-4	Lab ID: 9221424006	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:31	7440-38-2	
Barium	51.3 ug/L		5.0	1	06/18/08 17:15	06/19/08 17:31	7440-39-3	
Cadmium	ND ug/L		1.0	1	06/18/08 17:15	06/19/08 17:31	7440-43-9	
Chromium	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:31	7440-47-3	
Lead	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:31	7439-92-1	
Selenium	ND ug/L		10.0	1	06/18/08 17:15	06/19/08 17:31	7782-49-2	
Silver	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:31	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	06/16/08 10:25	06/16/08 14:01	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1	06/18/08 18:48	67-64-1		
Acrylonitrile	ND ug/L		10.0	1	06/18/08 18:48	107-13-1		
Benzene	1.2 ug/L		1.0	1	06/18/08 18:48	71-43-2		
Bromochloromethane	ND ug/L		1.0	1	06/18/08 18:48	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	06/18/08 18:48	75-27-4		
Bromoform	ND ug/L		1.0	1	06/18/08 18:48	75-25-2		
Bromomethane	ND ug/L		5.0	1	06/18/08 18:48	74-83-9		
2-Butanone (MEK)	ND ug/L		5.0	1	06/18/08 18:48	78-93-3		
Carbon disulfide	ND ug/L		2.0	1	06/18/08 18:48	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1	06/18/08 18:48	56-23-5		
Chlorobenzene	12.3 ug/L		1.0	1	06/18/08 18:48	108-90-7		
Chloroethane	3.5 ug/L		1.0	1	06/18/08 18:48	75-00-3		
Chloroform	ND ug/L		1.0	1	06/18/08 18:48	67-66-3		
Chloromethane	ND ug/L		1.0	1	06/18/08 18:48	74-87-3		
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1	06/18/08 18:48	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	06/18/08 18:48	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	06/18/08 18:48	106-93-4		
Dibromomethane	ND ug/L		1.0	1	06/18/08 18:48	74-95-3		
1,2-Dichlorobenzene	1.9 ug/L		1.0	1	06/18/08 18:48	95-50-1		
1,4-Dichlorobenzene	14.8 ug/L		1.0	1	06/18/08 18:48	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1	06/18/08 18:48	110-57-6		
1,1-Dichloroethane	ND ug/L		1.0	1	06/18/08 18:48	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1	06/18/08 18:48	107-06-2		
1,1-Dichloroethene	ND ug/L		1.0	1	06/18/08 18:48	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1	06/18/08 18:48	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1	06/18/08 18:48	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1	06/18/08 18:48	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		1.0	1	06/18/08 18:48	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1	06/18/08 18:48	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1	06/18/08 18:48	100-41-4		
2-Hexanone	ND ug/L		5.0	1	06/18/08 18:48	591-78-6		
Iodomethane	ND ug/L		5.0	1	06/18/08 18:48	74-88-4		
Methylene Chloride	ND ug/L		2.0	1	06/18/08 18:48	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1	06/18/08 18:48	108-10-1		

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-4	Lab ID: 9221424006	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Styrene	ND ug/L		1.0	1		06/18/08 18:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		06/18/08 18:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		06/18/08 18:48	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		06/18/08 18:48	127-18-4	
Toluene	ND ug/L		1.0	1		06/18/08 18:48	108-88-3	
1,1,1-Trichloroethane	ND ug/L		1.0	1		06/18/08 18:48	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		06/18/08 18:48	79-00-5	
Trichloroethene	ND ug/L		1.0	1		06/18/08 18:48	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		06/18/08 18:48	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		06/18/08 18:48	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		06/18/08 18:48	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		06/18/08 18:48	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		06/18/08 18:48	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		06/18/08 18:48	1330-20-7	
o-Xylene	ND ug/L		1.0	1		06/18/08 18:48	95-47-6	
4-Bromofluorobenzene (S)	99 %		87-109	1		06/18/08 18:48	460-00-4	
Dibromofluoromethane (S)	100 %		85-115	1		06/18/08 18:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	100 %		79-120	1		06/18/08 18:48	17060-07-0	
Toluene-d8 (S)	99 %		70-120	1		06/18/08 18:48	2037-26-5	

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-5	Lab ID: 9221424007	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:35	7440-38-2	
Barium	67.5 ug/L		5.0	1	06/18/08 17:15	06/19/08 17:35	7440-39-3	
Cadmium	2.3 ug/L		1.0	1	06/18/08 17:15	06/19/08 17:35	7440-43-9	
Chromium	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:35	7440-47-3	
Lead	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:35	7439-92-1	
Selenium	ND ug/L		10.0	1	06/18/08 17:15	06/19/08 17:35	7782-49-2	
Silver	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:35	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	06/20/08 10:00	06/20/08 15:13	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1	06/18/08 19:12	67-64-1		
Acrylonitrile	ND ug/L		10.0	1	06/18/08 19:12	107-13-1		
Benzene	1.0 ug/L		1.0	1	06/18/08 19:12	71-43-2		
Bromochloromethane	ND ug/L		1.0	1	06/18/08 19:12	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	06/18/08 19:12	75-27-4		
Bromoform	ND ug/L		1.0	1	06/18/08 19:12	75-25-2		
Bromomethane	ND ug/L		5.0	1	06/18/08 19:12	74-83-9		
2-Butanone (MEK)	ND ug/L		5.0	1	06/18/08 19:12	78-93-3		
Carbon disulfide	ND ug/L		2.0	1	06/18/08 19:12	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1	06/18/08 19:12	56-23-5		
Chlorobenzene	4.2 ug/L		1.0	1	06/18/08 19:12	108-90-7		
Chloroethane	2.4 ug/L		1.0	1	06/18/08 19:12	75-00-3		
Chloroform	ND ug/L		1.0	1	06/18/08 19:12	67-66-3		
Chloromethane	ND ug/L		1.0	1	06/18/08 19:12	74-87-3		
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1	06/18/08 19:12	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	06/18/08 19:12	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	06/18/08 19:12	106-93-4		
Dibromomethane	ND ug/L		1.0	1	06/18/08 19:12	74-95-3		
1,2-Dichlorobenzene	1.7 ug/L		1.0	1	06/18/08 19:12	95-50-1		
1,4-Dichlorobenzene	11.0 ug/L		1.0	1	06/18/08 19:12	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1	06/18/08 19:12	110-57-6		
1,1-Dichloroethane	1.0 ug/L		1.0	1	06/18/08 19:12	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1	06/18/08 19:12	107-06-2		
1,1-Dichloroethene	ND ug/L		1.0	1	06/18/08 19:12	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1	06/18/08 19:12	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1	06/18/08 19:12	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1	06/18/08 19:12	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		1.0	1	06/18/08 19:12	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1	06/18/08 19:12	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1	06/18/08 19:12	100-41-4		
2-Hexanone	ND ug/L		5.0	1	06/18/08 19:12	591-78-6		
Iodomethane	ND ug/L		5.0	1	06/18/08 19:12	74-88-4		
Methylene Chloride	ND ug/L		2.0	1	06/18/08 19:12	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1	06/18/08 19:12	108-10-1		

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
 Pace Project No.: 9221424

Sample: MW-5	Lab ID: 9221424007	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Styrene	ND	ug/L	1.0	1	06/18/08 19:12	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1	06/18/08 19:12	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	06/18/08 19:12	79-34-5		
Tetrachloroethene	ND	ug/L	1.0	1	06/18/08 19:12	127-18-4		
Toluene	ND	ug/L	1.0	1	06/18/08 19:12	108-88-3		
1,1,1-Trichloroethane	ND	ug/L	1.0	1	06/18/08 19:12	71-55-6		
1,1,2-Trichloroethane	ND	ug/L	1.0	1	06/18/08 19:12	79-00-5		
Trichloroethene	ND	ug/L	1.0	1	06/18/08 19:12	79-01-6		
Trichlorofluoromethane	ND	ug/L	1.0	1	06/18/08 19:12	75-69-4		
1,2,3-Trichloropropane	ND	ug/L	1.0	1	06/18/08 19:12	96-18-4		
Vinyl acetate	ND	ug/L	2.0	1	06/18/08 19:12	108-05-4		
Vinyl chloride	ND	ug/L	1.0	1	06/18/08 19:12	75-01-4		
Xylene (Total)	ND	ug/L	3.0	1	06/18/08 19:12	1330-20-7		
m&p-Xylene	ND	ug/L	2.0	1	06/18/08 19:12	1330-20-7		
o-Xylene	ND	ug/L	1.0	1	06/18/08 19:12	95-47-6		
4-Bromofluorobenzene (S)	99 %		87-109	1	06/18/08 19:12	460-00-4		
Dibromofluoromethane (S)	99 %		85-115	1	06/18/08 19:12	1868-53-7		
1,2-Dichloroethane-d4 (S)	101 %		79-120	1	06/18/08 19:12	17060-07-0		
Toluene-d8 (S)	99 %		70-120	1	06/18/08 19:12	2037-26-5		

ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-6	Lab ID: 9221424008	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:40	7440-38-2	
Barium	15.4 ug/L		5.0	1	06/18/08 17:15	06/19/08 17:40	7440-39-3	
Cadmium	ND ug/L		1.0	1	06/18/08 17:15	06/19/08 17:40	7440-43-9	
Chromium	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:40	7440-47-3	
Lead	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:40	7439-92-1	
Selenium	ND ug/L		10.0	1	06/18/08 17:15	06/19/08 17:40	7782-49-2	
Silver	ND ug/L		5.0	1	06/18/08 17:15	06/19/08 17:40	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	06/20/08 10:00	06/20/08 15:16	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1	06/18/08 19:36	67-64-1		
Acrylonitrile	ND ug/L		10.0	1	06/18/08 19:36	107-13-1		
Benzene	ND ug/L		1.0	1	06/18/08 19:36	71-43-2		
Bromochloromethane	ND ug/L		1.0	1	06/18/08 19:36	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	06/18/08 19:36	75-27-4		
Bromoform	ND ug/L		1.0	1	06/18/08 19:36	75-25-2		
Bromomethane	ND ug/L		5.0	1	06/18/08 19:36	74-83-9		
2-Butanone (MEK)	ND ug/L		5.0	1	06/18/08 19:36	78-93-3		
Carbon disulfide	ND ug/L		2.0	1	06/18/08 19:36	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1	06/18/08 19:36	56-23-5		
Chlorobenzene	ND ug/L		1.0	1	06/18/08 19:36	108-90-7		
Chloroethane	ND ug/L		1.0	1	06/18/08 19:36	75-00-3		
Chloroform	ND ug/L		1.0	1	06/18/08 19:36	67-66-3		
Chloromethane	ND ug/L		1.0	1	06/18/08 19:36	74-87-3		
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1	06/18/08 19:36	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	06/18/08 19:36	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	06/18/08 19:36	106-93-4		
Dibromomethane	ND ug/L		1.0	1	06/18/08 19:36	74-95-3		
1,2-Dichlorobenzene	ND ug/L		1.0	1	06/18/08 19:36	95-50-1		
1,4-Dichlorobenzene	ND ug/L		1.0	1	06/18/08 19:36	106-46-7		
trans-1,4-Dichloro-2-butene	ND ug/L		1.0	1	06/18/08 19:36	110-57-6		
1,1-Dichloroethane	ND ug/L		1.0	1	06/18/08 19:36	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1	06/18/08 19:36	107-06-2		
1,1-Dichloroethene	ND ug/L		1.0	1	06/18/08 19:36	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1	06/18/08 19:36	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1	06/18/08 19:36	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1	06/18/08 19:36	78-87-5		
cis-1,3-Dichloropropene	ND ug/L		1.0	1	06/18/08 19:36	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1	06/18/08 19:36	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1	06/18/08 19:36	100-41-4		
2-Hexanone	ND ug/L		5.0	1	06/18/08 19:36	591-78-6		
Iodomethane	ND ug/L		5.0	1	06/18/08 19:36	74-88-4		
Methylene Chloride	ND ug/L		2.0	1	06/18/08 19:36	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1	06/18/08 19:36	108-10-1		

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

Sample: MW-6	Lab ID: 9221424008	Collected: 06/12/08 00:00	Received: 06/13/08 13:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level		Analytical Method: EPA 8260						
Styrene	ND	ug/L	1.0	1		06/18/08 19:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		06/18/08 19:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/18/08 19:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		06/18/08 19:36	127-18-4	
Toluene	ND	ug/L	1.0	1		06/18/08 19:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/18/08 19:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/18/08 19:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/18/08 19:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		06/18/08 19:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/18/08 19:36	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		06/18/08 19:36	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		06/18/08 19:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		06/18/08 19:36	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/18/08 19:36	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		06/18/08 19:36	95-47-6	
4-Bromofluorobenzene (S)	100 %		87-109	1		06/18/08 19:36	460-00-4	
Dibromofluoromethane (S)	100 %		85-115	1		06/18/08 19:36	1868-53-7	
1,2-Dichloroethane-d4 (S)	100 %		79-120	1		06/18/08 19:36	17060-07-0	
Toluene-d8 (S)	100 %		70-120	1		06/18/08 19:36	2037-26-5	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

QC Batch: MERP/1537 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 9221424001, 9221424002, 9221424003, 9221424004, 9221424005, 9221424006

METHOD BLANK: 128292

Associated Lab Samples: 9221424001, 9221424002, 9221424003, 9221424004, 9221424005, 9221424006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ug/L	ND	0.20	

LABORATORY CONTROL SAMPLE: 128293

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.3	92	80-120	

MATRIX SPIKE SAMPLE: 128294

Parameter	Units	9221429003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.4	91	75-125	

SAMPLE DUPLICATE: 128295

Parameter	Units	9221429006 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	ND	.18J	11	

QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0

Pace Project No.: 9221424

QC Batch:	MSV/3746	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level
Associated Lab Samples:	9221424001, 9221424002, 9221424003, 9221424004		

METHOD BLANK: 128864

Associated Lab Samples: 9221424001, 9221424002, 9221424003, 9221424004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	5.0	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0

Pace Project No.: 9221424

METHOD BLANK: 128864

Associated Lab Samples: 9221424001, 9221424002, 9221424003, 9221424004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	100	79-120	
4-Bromofluorobenzene (S)	%	101	87-109	
Dibromofluoromethane (S)	%	91	85-115	
Toluene-d8 (S)	%	96	70-120	

LABORATORY CONTROL SAMPLE: 128865

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	66.5	133	83-125	L3
1,1,1-Trichloroethane	ug/L	50	59.0	118	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	52.0	104	73-127	
1,1,2-Trichloroethane	ug/L	50	58.6	117	77-123	
1,1-Dichloroethane	ug/L	50	52.0	104	76-129	
1,1-Dichloroethene	ug/L	50	45.3	91	78-146	
1,2,3-Trichloropropane	ug/L	50	55.3	111	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	47.4	95	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	60.2	120	81-125	
1,2-Dichlorobenzene	ug/L	50	59.8	120	82-126	
1,2-Dichloroethane	ug/L	50	55.8	112	72-126	
1,2-Dichloropropane	ug/L	50	54.4	109	80-127	
1,4-Dichlorobenzene	ug/L	50	59.4	119	79-125	
2-Butanone (MEK)	ug/L	100	95.5	96	50-134	
2-Hexanone	ug/L	100	102	102	58-138	
4-Methyl-2-pentanone (MIBK)	ug/L	100	93.5	93	70-131	
Acetone	ug/L	100	118	118	50-146	
Acrylonitrile	ug/L	250	229	91	66-124	
Benzene	ug/L	50	55.6	111	78-128	
Bromochloromethane	ug/L	50	52.5	105	73-124	
Bromodichloromethane	ug/L	50	63.4	127	81-125	L3
Bromoform	ug/L	50	54.8	110	71-125	
Bromomethane	ug/L	50	39.2	78	50-150	
Carbon disulfide	ug/L	50	56.8	114	54-150	
Carbon tetrachloride	ug/L	50	66.2	132	81-137	
Chlorobenzene	ug/L	50	60.5	121	82-126	
Chloroethane	ug/L	50	41.5	83	69-140	
Chloroform	ug/L	50	60.8	122	77-129	
Chloromethane	ug/L	50	36.2	72	54-139	
cis-1,2-Dichloroethene	ug/L	50	51.4	103	76-133	
cis-1,3-Dichloropropene	ug/L	50	58.3	117	76-127	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

LABORATORY CONTROL SAMPLE: 128865

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/L	50	57.0	114	77-125	
Dibromomethane	ug/L	50	62.7	125	77-125	
Ethylbenzene	ug/L	50	62.2	124	80-127	
Iodomethane	ug/L	100	135	135	65-172	
m&p-Xylene	ug/L	100	111	111	82-127	
Methylene Chloride	ug/L	50	44.3	89	67-133	
o-Xylene	ug/L	50	60.9	122	83-124	
Styrene	ug/L	50	61.9	124	80-130	
Tetrachloroethene	ug/L	50	63.2	126	78-128	
Toluene	ug/L	50	57.2	114	76-126	
trans-1,2-Dichloroethene	ug/L	50	47.8	96	78-134	
trans-1,3-Dichloropropene	ug/L	50	62.2	124	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	49.6	99	51-140	
Trichloroethene	ug/L	50	61.9	124	79-127	
Trichlorofluoromethane	ug/L	50	54.3	109	76-148	
Vinyl acetate	ug/L	100	83.1	83	50-150	
Vinyl chloride	ug/L	50	48.0	96	67-143	
Xylene (Total)	ug/L	150	171	114	83-125	
1,2-Dichloroethane-d4 (S)	%			92	79-120	
4-Bromofluorobenzene (S)	%			104	87-109	
Dibromofluoromethane (S)	%			95	85-115	
Toluene-d8 (S)	%			96	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 128871 128872

Parameter	Units	9221391007 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result					
1,1-Dichloroethene	ug/L	ND	50	50	44.0	57.7	88	115	60-150	27	
Benzene	ug/L	ND	50	50	47.6	66.5	95	133	74-136	33	M1,R1
Chlorobenzene	ug/L	ND	50	50	50.5	70.4	101	141	79-135	33	M1,R1
Toluene	ug/L	ND	50	50	49.5	68.5	99	137	73-131	32	M1,R1
Trichloroethene	ug/L	ND	50	50	52.8	72.3	106	145	73-131	31	M1,R1
1,2-Dichloroethane-d4 (S)	%					94	93	93	79-120		
4-Bromofluorobenzene (S)	%					105	105	105	87-109		
Dibromofluoromethane (S)	%					93	91	91	85-115		
Toluene-d8 (S)	%					98	98	98	70-120		

QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0

Pace Project No.: 9221424

QC Batch:	MSV/3747	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level
Associated Lab Samples:	9221424005, 9221424006, 9221424007, 9221424008		

METHOD BLANK: 128868

Associated Lab Samples: 9221424005, 9221424006, 9221424007, 9221424008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	6.6	5.0 B-	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0

Pace Project No.: 9221424

METHOD BLANK: 128868

Associated Lab Samples: 9221424005, 9221424006, 9221424007, 9221424008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	98	79-120	
4-Bromofluorobenzene (S)	%	98	87-109	
Dibromofluoromethane (S)	%	98	85-115	
Toluene-d8 (S)	%	99	70-120	

LABORATORY CONTROL SAMPLE: 128869

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	61.9	124	83-125	
1,1,1-Trichloroethane	ug/L	50	56.3	113	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	58.6	117	73-127	
1,1,2-Trichloroethane	ug/L	50	59.5	119	77-123	
1,1-Dichloroethane	ug/L	50	57.2	114	76-129	
1,1-Dichloroethene	ug/L	50	48.7	97	78-146	
1,2,3-Trichloropropane	ug/L	50	57.6	115	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	53.4	107	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	59.6	119	81-125	
1,2-Dichlorobenzene	ug/L	50	59.7	119	82-126	
1,2-Dichloroethane	ug/L	50	57.1	114	72-126	
1,2-Dichloropropane	ug/L	50	59.8	120	80-127	
1,4-Dichlorobenzene	ug/L	50	58.3	117	79-125	
2-Butanone (MEK)	ug/L	100	124	124	50-134	
2-Hexanone	ug/L	100	128	128	58-138	
4-Methyl-2-pentanone (MIBK)	ug/L	100	116	116	70-131	
Acetone	ug/L	100	151	151	50-146 L3	
Acrylonitrile	ug/L	250	306	122	66-124	
Benzene	ug/L	50	56.3	113	78-128	
Bromochloromethane	ug/L	50	48.1	96	73-124	
Bromodichloromethane	ug/L	50	60.0	120	81-125	
Bromoform	ug/L	50	53.8	108	71-125	
Bromomethane	ug/L	50	55.9	112	50-150	
Carbon disulfide	ug/L	50	61.3	123	54-150	
Carbon tetrachloride	ug/L	50	54.1	108	81-137	
Chlorobenzene	ug/L	50	58.4	117	82-126	
Chloroethane	ug/L	,50	49.8	100	69-140	
Chloroform	ug/L	50	61.1	122	77-129	
Chloromethane	ug/L	50	39.7	79	54-139	
cis-1,2-Dichloroethene	ug/L	50	56.2	112	76-133	
cis-1,3-Dichloropropene	ug/L	50	60.5	121	76-127	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

LABORATORY CONTROL SAMPLE: 128869

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/L	50	53.2	106	77-125	
Dibromomethane	ug/L	50	59.2	118	77-125	
Ethylbenzene	ug/L	50	59.8	120	80-127	
Iodomethane	ug/L	100	133	133	65-172	
m&p-Xylene	ug/L	100	119	119	82-127	
Methylene Chloride	ug/L	50	52.1	104	67-133	
o-Xylene	ug/L	50	58.5	117	83-124	
Styrene	ug/L	50	59.0	118	80-130	
Tetrachloroethene	ug/L	50	57.1	114	78-128	
Toluene	ug/L	50	57.4	115	76-126	
trans-1,2-Dichloroethene	ug/L	50	51.1	102	78-134	
trans-1,3-Dichloropropene	ug/L	50	60.7	121	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	56.0	112	51-140	
Trichloroethene	ug/L	50	56.6	113	79-127	
Trichlorofluoromethane	ug/L	50	58.0	116	76-148	
Vinyl acetate	ug/L	100	116	116	50-150	
Vinyl chloride	ug/L	50	55.4	111	67-143	
Xylene (Total)	ug/L	150	177	118	83-125	
1,2-Dichloroethane-d4 (S)	%		99		79-120	
4-Bromofluorobenzene (S)	%		101		87-109	
Dibromofluoromethane (S)	%		102		85-115	
Toluene-d8 (S)	%		100		70-120	

QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0
 Pace Project No.: 9221424

QC Batch:	MPRP/2543	Analysis Method:	EPA 6010 GW North Carolina
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET NC Groundwater
Associated Lab Samples:	9221424001, 9221424002, 9221424003, 9221424004, 9221424005, 9221424006, 9221424007, 9221424008		

METHOD BLANK: 129141

Associated Lab Samples: 9221424001, 9221424002, 9221424003, 9221424004, 9221424005, 9221424006, 9221424007, 9221424008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Arsenic	ug/L	ND	5.0	
Barium	ug/L	ND	5.0	
Cadmium	ug/L	ND	1.0	
Chromium	ug/L	ND	5.0	
Lead	ug/L	ND	5.0	
Selenium	ug/L	ND	10.0	
Silver	ug/L	ND	5.0	

LABORATORY CONTROL SAMPLE: 129142

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	500	479	96	80-120	
Barium	ug/L	500	477	95	80-120	
Cadmium	ug/L	500	491	98	80-120	
Chromium	ug/L	500	496	99	80-120	
Lead	ug/L	500	494	99	80-120	
Selenium	ug/L	500	477	95	80-120	
Silver	ug/L	250	245	98	80-120	

MATRIX SPIKE SAMPLE: 129696

Parameter	Units	9221424001		MS		% Rec Limits	Qualifiers
		Result	Spike Conc.	Result	% Rec		
Arsenic	ug/L	ND	500	468	93	75-125	
Barium	ug/L	32.7	500	487	91	75-125	
Cadmium	ug/L	ND	500	468	94	75-125	
Chromium	ug/L	ND	500	472	94	75-125	
Lead	ug/L	ND	500	466	93	75-125	
Selenium	ug/L	ND	500	461	92	75-125	
Silver	ug/L	ND	250	234	94	75-125	

SAMPLE DUPLICATE: 129697

Parameter	Units	9221424002		RPD	Qualifiers
		Result	Dup Result		
Arsenic	ug/L	ND	ND	150	
Barium	ug/L	36.0	36.3	.8	
Cadmium	ug/L	ND	ND	18	
Chromium	ug/L	ND	.48J	42	
Lead	ug/L	ND	ND	0	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0

Pace Project No.: 9221424

SAMPLE DUPLICATE: 129697

Parameter	Units	9221424002 Result	Dup Result	RPD	Qualifiers
Selenium	ug/L	ND	ND	200	
Silver	ug/L	ND	.11J	6	

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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QUALITY CONTROL DATA

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

QC Batch: MERP/1544 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 9221424007, 9221424008

METHOD BLANK: 129798

Associated Lab Samples: 9221424007, 9221424008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ug/L	ND	0.20	

LABORATORY CONTROL SAMPLE: 129799

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.6	103	80-120	

MATRIX SPIKE SAMPLE: 129800

Parameter	Units	9221450003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.7	107	75-125	

SAMPLE DUPLICATE: 129801

Parameter	Units	9221483001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	ND	ND	0	

QUALIFIERS

Project: CASWELL COUNTY LANDFILL 1584-0
Pace Project No.: 9221424

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

ANALYTE QUALIFIERS

B- Analyte detected in method blank but was not detected in the associated samples.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

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CHAIN-OFF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: _____ of _____

1111159

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER _____

Site Location

DATE: _____

Project Number:

Project Profile #: 1298-2

Requested Analysis Filtered (Y/N)

Y/N

Preservatives

APP 1 VOC

SAMPLE TEMP AT COLLECTION

OF CONTAINERS

Unpreserved

H₂SO₄

Analysis Test

X X X X

HNO₃

X X X X

HCl

X X X X

NaOH

X X X X

Na₂S₂O₃

X X X X

Methanol

X X X X

Other

X X X X

APP 1 8 PLATE MEAS

9001404

Residual Chlorine (Y/N)

X X X X

Pace Project No./Lab ID.

001

ITEM #

DATE

TIME

6/12

COLLECTED

DATE

TIME

6/13/08 11:04

Preservatives

DATE

TIME

6/13/08 13:40

Sample ID

DATE

TIME

6/13/08 13:40

Matrix Codes

DATE

TIME

6/13/08 13:40

MATRIX CODE

DATE

TIME

6/13/08 13:40

DRINKING WATER

DATE

TIME

6/13/08 13:40

WT

DATE

TIME

6/13/08 13:40

WW

DATE

TIME

6/13/08 13:40

P

DATE

TIME

6/13/08 13:40

SL

DATE

TIME

6/13/08 13:40

OL

DATE

TIME

6/13/08 13:40

WP

DATE

TIME

6/13/08 13:40

AR

DATE

TIME

6/13/08 13:40

OT

DATE

TIME

6/13/08 13:40

COMPOSITE

DATE

TIME

6/13/08 13:40

START

DATE

TIME

6/13/08 13:40

END/GRAB

DATE

TIME

6/13/08 13:40

SAMPLE TYPE

DATE

TIME

6/13/08 13:40

(G=GRAB C=COMP)

DATE

TIME

6/13/08 13:40

ITEM #

DATE

TIME

6/13/08 13:40

SAMPLE ID

DATE

TIME

6/13/08 13:40

Sample IDs MUST BE UNIQUE

DATE

TIME

6/13/08 13:40

A-Z, 0-9, -

DATE

TIME

6/13/08 13:40

Other

DATE

TIME

6/13/08 13:40

DRINKING WATER

DATE

TIME

6/13/08 13:40

Waste Water

DATE

TIME

6/13/08 13:40

Product

DATE

TIME

6/13/08 13:40

Soil/Solid

DATE

TIME

6/13/08 13:40

Oil

DATE

TIME

6/13/08 13:40

Wipe

DATE

TIME

6/13/08 13:40

Air

DATE

TIME

6/13/08 13:40

Tissue

DATE

TIME

6/13/08 13:40

Other

DATE

TIME

6/13/08 13:40

COLLECTED

DATE

TIME

6/13/08 13:40

Preservatives

DATE

TIME

6/13/08 13:40

Sample Temp at Collection

DATE

TIME

6/13/08 13:40

of Containers

DATE

TIME

6/13/08 13:40

Unpreserved

DATE

TIME

6/13/08 13:40

H₂SO₄

DATE

TIME

6/13/08 13:40

</



Sample Condition Upon Receipt

Client Name: SIME Project # 9221424

Courier: FedEx UPS USPS Client Commercial Pace Other _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used T060

Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 3.4

Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Comments: _____

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	N/A	

Client Notification/ Resolution:

Field Data Required? Y / N / N/A

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

Project Manager Review:

KCH

Date: 6/16/08